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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/814,173	03/22/2001	Dmitry Levitan	40495	2800

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EXAMINER

PHAM, TUAN

ART UNIT	PAPER NUMBER
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2643

DATE MAILED: 03/09/2004

7

Please find below and/or attached an Office communication concerning this application or proceeding.

SM

Office Action Summary

Application No.

09/814,173

Applicant(s)

LEVITAN, DMITRY

Examiner

TUAN A PHAM

Art Unit

2643

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 March 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 4.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

2. The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

3. Claims 1-3, 5-11, and 13 are rejected under 35 U.S.C. 102(e) as being anticipated by Gutzmann et al. (U.S. Patent No. 6,118,861, hereinafter, "Gutzmann").

Regarding claim 1, Gutzmann teaches a channel unit in a digital loop carrier, the channel unit being coupled to at least one telephone via a subscriber line, the at least one telephony device being operable to generate tones (see figure 1), the channel unit comprising:

a tone detector coupled to the subscriber line, the tone detector being operable to detect tones transmitted via the subscriber line to produce an output corresponding to

an off-hook control signal (see figure 5, DTMF detector 84, col.2, ln.1-21, col.7, ln.20-30); and

a processing device coupled to the tone detector and programmable to receive the output of the tone detector, to evaluate the output to determine if the tones corresponding thereto represent the off-hook control signal (see figure 5, DTMF detector 84, CPU 85, col.7, ln.14-40), the off-hook control signal using at least one of a preselected order, a preselected number and preselected ones of the tones, the processing device being operable to maintain the subscriber line off-hook for a selected period of time if the output indicates the off-hook control signal, and maintain the telephony device off-hook and on-hook in accordance with when a subscriber line requests and terminates, respectively, a connection via the subscriber line using the telephony device, if the programmable device determines that the tone is not the off-hook sequence tone (see col.2, ln.1-20, col.7, ln.1-40).

Regarding claim 2, Gutzmann further teaches a channel unit wherein the processing device is programmable to maintain the subscriber line a user returns off-hook when the output indicates the off-hook control signal regardless of whether a user returns the telephony device to an on-hook position (see col.2, ln.1-20).

Regarding claim 3, Gutzmann further teaches a channel unit wherein the tone detector includes a dual-tone multi-frequency tone detector (see figure 5, DTMF detector 84).

Regarding claim 5, Gutzmann further teaches a channel unit wherein the processing device includes a microcontroller programmable to process the output and

transmit signals to a central office indicating on-hook and off-hook states in accordance with the output (see figure 5, CPU 85, col.7, ln.30-35).

Regarding claim 6, Gutzmann further teaches a channel unit wherein the subscriber line is held in an off-hook position for approximately 30 seconds when the output is determined to comprise the off-hook control signal (see col.4, ln.60-65).

Regarding claim 7, Gutzmann further teaches a channel unit wherein the off hook sequence tone is generated by depressing the star (*) key on the keypad of the telephone a selected number of times (see col.6, ln.6-13).

Regarding claim 8, Gutzmann further teaches a channel unit wherein the selected number of times for depressing the star key includes three (see col.6, ln.6-13).

Regarding claim 9, Gutzmann teaches a method for off-hook management on a subscriber line in a digital loop carrier, comprising the steps of:

detecting tones transmitted from a telephony device via the subscriber line (see figure 5, DTMF detector 84, col.5, ln.40-50),

maintaining the subscriber line off-hook for a selected period of time despite a user returning the telephony device to an on-hook position if the tones comprise an off-hook control signal (see figure 5, CPU 85, col.7, ln.30-40), and

operating the subscriber line in one of an off-hook state and an on-hook state in response to the user operation of the telephony device if the programmable device determines the tones does not comprise the off-hook control signal (see col.2, ln.1-20).

Regarding claim 10, Gutzmann further teaches a method wherein the maintaining step comprises the step of holding the subscriber line in an off-hook position for approximately 30 seconds (see col.4, ln.60-65).

Regarding claim 11, Gutzmann further teaches a method wherein the off-hook control signal is generated by depressing the star (*) key on a keypad of the telephony device a selected number of times (see col.6, ln.6-13).

Regarding claim 13, Gutzmann further teaches a method wherein the off-hook control signal is generated by transmitting a plurality of dual-tone multi-frequency tones using at least one of a selected number and a selected order of the tones (see col.5, ln.40-51).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 4 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gutzmann et al. (U.S. Patent No. 6,118,861, hereinafter, "Gutzmann").

Regarding claims 4 and 12, Gutzmann fails to clearly teach a method of using the tone detector detects frequencies from approximately 650 Hz to approximately 1650 Hz. However, the tone detector device is well known in the communication system, detecting the voice frequency range from 0Hz-3KHz.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the use of tone detector, as taught by Gutzmann, within other communication devices for detecting the frequency range, in order to improve the tone signal in communication system.

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. In order to expedite the prosecution of this application, the applicants are also requested to consider the following references. Although Rosen et al. (U.S. Patent No. 5,850,436), Gaglani (U.S. Patent No. 5,572,587), Rowan (U.S. Patent No. 5,822,403), and Wu (U.S. Patent No. 6,157,713) are not applied into this Office Action, they are also called to Applicants attention. They may be used in future Office Action(s). These references are also concerned for supporting the system and method for easing wait time in queue and calling party invoked held call monitoring.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Tuan A. Pham** whose telephone number is (703) 305-4987 and E-mail address is: **tuan.pham@USPTO.GOV**.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Curtis Kuntz, can be reached on (703) 305-4708 and

IF PAPER HAS BEEN MISSED FROM THIS OFFICIAL ACTION PACKAGE, PLEASE CALL Customer Service at (703) 306-0377 FOR THE SUBSTITUTIONS OR COPIES.

Any response to this action should be mailed to:

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Commissioner of Patents and Trademarks

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Or faxed to:

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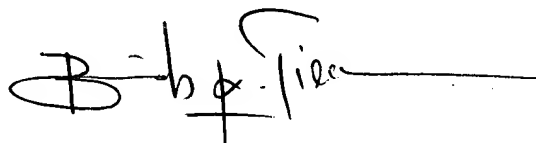
Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal
Drive, Arlington VA, Sixth Floor (Receptionist, tel. No. 703-305-4700).

Art Unit 2643

Date: February 19, 2004

Examiner

Tuan Pham



BINH TIEU
PRIMARY EXAMINER